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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,832	01/11/2002	DoInn Nathan Boatman	8835	1184

27752 7590 05/07/2003

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[REDACTED] EXAMINER

NGUYEN, ANTHONY H

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2854

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/043,832	BOATMAN ET AL.
	Examiner	Art Unit
	Anthony H Nguyen	2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 March 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,3</u> . | 6) <input type="checkbox"/> Other: _____ |

Drawings

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. The drawing (Figure 6) which purports to show an aerodynamic surface and a partition having a beveled edge oriented in the upward direction of the air flow (claims 6, and 8) is misleading since the three edges shown (800) appear to be straight edges. Applicant is required to provide a new drawing showing a flexible plate and plate cylinder more clearly.

Specification

The disclosure is objected to because of the following informalities: On page 8 line 30, “0.51 mm” should be obviously --3.3 m.m.--, and line 32, “86.4 mm” should be -- 2194 mm² or 21.94 cm²--.

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 14-17,20 and 22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. Specifically, With respect to claims 9 and 14, it is unclear that the beveled edge has an angle of less than 45° relative to the partition surface or the normal line with respect to the surface to be cleaned. With respect to claim 17, it is unclear the angle range is relative to what surface. Claim 22 is improper because the claim appears to be a dependent claim but it refers to no parent claim.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2, 4-7, 11-13, 17-19, 21 and 22 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over the admitted prior art of Figures 12 and 13.

With respect to claims 1,2,12, and 13, the admitted prior art of Figures 12 and 13 teaches a cleaning apparatus having substantially the structure as recited. For examples, the admitted prior art teaches a plenum (the upper part of Fig.12), a head (the lower part of Fig.12) which includes two banks of air jets and vacuum ports (which appears to have three vacuum ports) connected to the plenum and a nozzle inside one of the vacuum ports. The admitted prior art does not teach the banks of air jets which are offset to each other. However, it would have been obvious to one of ordinary skill in the art to modify the two banks of air jets of the admitted prior

art so that one bank of air jets is offset from a second bank of air jets for optimum cleaning effects on the surface of a cylinder.

With respect to claims 4, 18, 19, 21 and 22, the selection of a desired velocity and the droplet size of the cleaning fluid would be obvious through routine experimentation in order to get best possible cleaning effects on the surface to be cleaned.

With respect to claim 5, 6, 7, 11, Figures 12 (the bottom) of the admitted prior art shows a curve edge of the aerodynamic surface of the head relative the curve surface of a cylinder.

Claims 3, 15, and 16 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over the admitted prior art of Figures 12 and 13 in view of Flynn et al. (US 4,872,920).

The admitted prior art of Figures 12 and 13 teaches all that is claimed, except for the nozzle which is positioned outboard of the vacuum ports. Flynn et al. teaches the nozzles 14 which positioned inside or outside the vacuum port 74 in the suction head 15 as shown in Figs. 2 and 4 of Flynn et al. Therefore, it would have been obvious to one of ordinary skill in the art to modify the cleaning apparatus of the admitted prior art of Figures 12 and 13 by positioning the nozzle outboard of the vacuum ports as taught by Flynn et al. for quickly mounting a selected nozzle to a head for cleaning.

With respect to claim 16, note that the angle of the nozzle 14 of Flynn et al. which is positioned at the angle about -45° to the normal of the surface to be cleaned as shown in Fig. 2 is within the angle range as recited.

Claims 8-10, 14 and 20 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over the admitted prior art of Figures 12 and 13 in view of Olbrant et al. (US 3,775,806).

With respect to claim 8, the admitted prior art of Figures 12 and 13 teaches all that is claimed except for the partition of the vacuum ports having a beveled edge. Olbrant et al. teaches an apparatus for removing and collecting dust having a blowing box or a housing which includes a partition 4a having a beveled edge positioned inside a suction box 6. The beveled

edge is positioned close to the inturned lips 27 or the outturned lips 38 to facilitate the flow of air to the suction box 36 (Olbrant et al., Figs.1,3 and 4). To one of ordinary skill in the art, it would have been obvious to one of ordinary skill in the art to modify the partition separating the vacuum port in the admitted prior art by providing the beveled edge as taught by Olbrant et al. for increasing the velocity of the cleaning fluid to the suction box.

With respect to claims 9, 14 and 20, the selection of a desired angle of the beveled edge would be obvious since the use of variety of angles to increase the speed of fluid is well known. The selecting of a desired angel of the beveled edge would be obvious through routine experimentation for optimum the flow of cleaning fluid to a suction box.

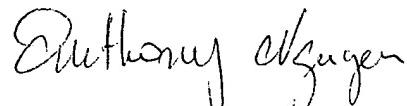
With respect to claim 10, Olbrant et al. teaches a guiding bar 39 which function as an anti-plate striping element, to one of ordinary skill in the art, it would have been obvious to one of ordinary skill in the art to modify the cleaning apparatus of the admitted prior art of Figures 12 and 13 by providing the anti-plate striping element as taught by Olbrant et al. for optimum of protecting of the surface to be cleaned.

Conclusion

The patents to Lindstrom et al., Ahvenniemi et al., Bock, and Teng are cited to show other structures having obvious similarities to the claimed structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (703) 308-2869. The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (703) 305-6619. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Anthony Nguyen
5/5/03
Patent Examiner
Technology Center 2800